

REMARKS

Claims 25-30 and 41-54 are presented for consideration, with Claims 25, 30, 44, 49, 53 and 54 being independent.

Claims 25, 28-30, 41, 42, 44, 47-51, 53 and 54 stand rejected under 35 U.S.C. §103 as allegedly being obvious over Gotoh '196 in view of Gondek '990 and Velde '438. The remaining claims stand rejected under 35 U.S.C. §103 as allegedly being obvious over those citations and further in view of Aschman '578 (Claims 26 and 45) or Sanger '601 and Kakutani '212 (Claims 27, 43, 46 and 52). These rejections are respectfully traversed.

Applicant's invention as set forth in Claim 25 relates to an image processing apparatus comprised of a first unit for converting primary color data into color data for outputting a dark color material only in a first mode, wherein the primary color has any two of maximum values and one of minimum value of colors R, G and B, and a second unit for converting the primary color data having any two of maximum values and one of minimum values of colors R, G and B into color data for outputting both the dark color material and a light color material in a second mode. As claimed, the color data converted from the primary color data in the second mode is color data for outputting both the dark color material corresponding to a complementary color of the minimum value of colors and light ink material other than the complementary color of the minimum value of colors.

The primary citation to Gotoh relates to a recording method that uses light and dark color inks. The Office Action relies on Gotoh for teaching a first unit for converting primary color data into color data for outputting a dark color material in the first mode, and a second unit for converting the primary color data into color data for outputting both the dark color material and a light color material in a second mode.

The secondary citation to Gondek relates to an ink jet printing system and method and is capable of converting R, G and B images using a conversion table. The Office Action asserts that Gondek discloses two features not provided for in Gotoh: (1) a first mode wherein the primary color has any two of maximum values and one of minimum values of colors R, G and B; and (2) a second mode wherein the color data converted from primary color data in the second mode is color data for outputting both the dark color material corresponding to a complementary color of the minimum value of colors and light ink material other than the complementary color of the minimum value of colors.

The tertiary citation to Velde relates to a color separation method and is relied on for its teaching of a second unit for converting primary color data having any two of maximum values and one of minimum values of colors R, G and B.

Without conceding to the propriety of combining the art in the manner proposed in the Office Action, it is submitted that such a combination still fails to teach or suggest Applicant's invention as set forth in Claim 25. In this regard, Applicant respectfully takes issue with the Office Action's reading of the Gondek patent. In particular, the Office Action asserts that Gondek discloses, in the conversion table shown in columns 7 and 8, a transition from white to magenta to black (R, G, B=6, 0, 6) and a transition from white to cyan to black (R, G, B=0, 6, 6) in which light cyan (Lc) is 120 and light magenta (Lm) is 120, thus providing color data for outputting light ink material.

It is respectfully submitted, however, that primary color data in Gondek should be taken from (R, G, B=8, 8, 0) (8, 0, 8) (0, 8, 8), based on Figure 3 and the disclosure in column 7, lines 29-32. The conversion table shows that in the case of (R, G, B) = (8, 8, 0), the converted data is Y = 208, corresponding to a dark color material, and Lc = 0 and Lm = 0, corresponding to

light color materials. In $(R, G, B) = (8, 0, 8)$, the data is converted into $M = 208$, corresponding to a dark color material, and $L_c = 0$ and $L_m = 0$, corresponding to light color materials. Finally, when $(R, G, B) = (0, 8, 8)$, data is converted into data having $C = 208$, which corresponds to a dark color material, and $L_c = 0$ and $L_m = 0$, which corresponds to light color materials. As this indicates, in Gondek light color materials are not output in each case of (R, G, B) corresponding to a primary color.

It is submitted, therefore, that the proposed combination of art, even if proper, still fails to teach or suggest Applicant's invention as set forth in Claim 25. Independent Claims 44 and 53 relate to an image processing method and a computer readable medium, respectively, and correspond to Claim 25. These claims are thus also submitted to be patentable over the proposed combination of art.

With respect to Claim 30, an image processing apparatus for forming an image by using the dark color materials and light color materials includes a first unit for forming an image by using just the dark color material for reproducing primary color data in a first mode, wherein the primary color has any two of maximum values and one of minimum value of colors R, G and B, and a second unit for forming an image by using the dark color material and a light color material having a different color from the dark color material for reproducing the primary color data having any two of maximum values and one of minimum values of colors R, G and B in a second mode. The image formed in the second mode is formed by using both the dark color material corresponding to a complementary color of the minimum value of colors and light ink material other than the complementary color of the minimum value of colors.

In Claim 30, therefore, the second unit forms an image by using a dark color material and a light color material for reproducing the primary color data having any two of maximum

values and one of minimum values of colors R, G and B in the second mode, with the image formed in the second mode by using both the dark color material corresponding to a complementary color of the minimum values of colors and light ink material other than a complementary color of the minimum value of colors. It is submitted that these features of Applicant's invention are not taught or suggested by Gondek, which has been discussed above. Accordingly, the proposed combination of Gotoh, Gondek and Velde, even if proper, fails to teach or suggest Claim 30 of Applicant's invention. Independent Claims 49 and 54 relate to an image processing method and a computer readable recording method, respectively, and correspond to Claim 30. These claims are thus also submitted to be patentable for the reasons discussed above.

Accordingly, reconsideration and withdrawal of the rejection of Claims 25, 28, 29, 30, 41, 42, 44, 47, 48, 49, 50, 51, 53 and 54 under 35 U.S.C. §103 is respectfully requested.

The Aschman citation relates to an image processing apparatus and is relied on for its teaching of a fast printing mode. Sanger relates to a printing apparatus and is relied on for its teaching of a color matching mode. Finally, Kakutani relates to a printing system and is used for its teaching of a mode for lowering granularity. These citations fail, however, to compensate for the deficiencies in Gotoh, Gondek and Velde as discussed above.

Accordingly, without conceding to the propriety of combining the art in the manner proposed in the Office Action, reconsideration and withdrawal of the remaining rejections under 35 U.S.C. §103 are respectfully requested.

Thus, it is submitted that Applicant's invention as set forth in independent Claims 25, 30, 44, 49, 53 and 54 is patentable over the cited art. In addition, dependent Claims 26-29, 41-

43, 45-48 and 50-52 set forth additional features of Applicant's invention. Independent consideration of the dependent claims is respectfully requested.

REQUEST FOR INTERVIEW

Applicant respectfully requests a telephone interview in the subject application. Applicant's undersigned representative will contact the Examiner within one week's time for the purpose of scheduling the interview.

CONCLUSION

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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